

REMARKS

The present Amendment cancels claims 1-32 and adds new claims 33-39. Therefore, the present application has pending claims 33-39.

In paragraph 2 of the Office Action the Examiner objected to claims 11-20, 22, 28 and 29 under 37 CFR §1.75(c) as being in improper form being that a multiple dependent claim cannot depend from any other multiple dependent claim. As indicated above, claims 11-20, 22, 28 and 29 were canceled. Therefore, this rejection is rendered moot.

Applicants acknowledge the Examiner's indication in paragraph 4 of the Office Action that claims 10, 27 and 30-32 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. New claims 34-39 correspond to claims 10, 27 and 30-32, rewritten to be in independent form including all the limitations of the base claim and any intervening claims. Particularly, due to the multiple dependency of claims 10, 27 and 30-32 new claims 34-39 were rewritten in independent form including the limitations of the appropriate features recited in the various claims from which each claim depends. Thus, new claims 34-39 recite the same features of claims 10, 27 and 30-32 recognized by the Examiner as being allowable over the prior art of record. Therefore, new claims 34-39 are allowable as indicated by the Examiner.

Claims 1-9, 21 and 23-26 stand rejected under 35 USC §102(e) as being anticipated by Vasudevan (U.S. Patent No. 5,887,172). As indicated above, claims 1-9, 21 and 23-26 were canceled. Therefore, this rejection is rendered moot.

Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

It should be noted that the cancellation of claims 1-9, 21 and 23-26 was not intended nor should it be considered as an agreement on Applicants part that the features recited in claims 1-9, 21 and 23-26 are taught or suggested by any of the references of record particularly Vasudevan. The cancellation of claims 1-9, 21 and 23-26 was simply intended to expedite prosecution of the present application.

The present Amendment adds new claim 33. New claim 33 includes the subject matter of claim 3 and additional features similar to that recited in claims 34-39 recognized by the Examiner as being allowable over the prior art of record. Particularly, new claim 33 recites a remote procedure call (RPC) optimizing method for optimizing RCPs between a server offering at least one remote procedure and a client carrying out processing by use of a RPC calling the at least one remote procedure, on a computer for executing at least one of a program or a program part when an interface definition language (IDL) description for the remote procedure is provided.

Unique according to the present invention is that the remote procedure call optimizing method includes analyzing a source code of the client so as to detect a remote procedure execution sequence constituting a set of RPCs that are highly likely to be executed successively, determining a new remote procedure for executing the remote procedure execution sequence in a single RPC and defining an interface of the new remote procedure having been determined into the IDL description so as to allow the client to call the new remote procedure.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention are not taught or suggested by Vasudevan.

Vasudevan is directed to an approach of unifying conventionally practiced versatile IDLs for describing RPCs. As the Abstract of Vasudevan says, the system and method of Vasudevan uses client and server stubs including a mechanism-independent canonical specification of each procedure interface.

Vasudevan introduces the canonical specification which are to be used as a language canon to all such plural IDLs, with some modification e.g., if the canonical specification is to be used for two IDLs among plural IDLs, the canonical specification is modified (selecting a mechanism from the library etc.) to meet the specific programming language and operating system constraints of the execution environment of the plural IDLs (col. 7, lines 3-5). Since the canonical specification to be used is dynamically modified as mentioned above, the RPC described by such modified canonical specification is defined as a VRPC (Virtual RPC).

The above described features taught by Vasudevan do not anticipate nor render obvious the features of the present invention. Particularly, the above described features taught by Vasudevan fails to teach or suggest two novel features of the present invention. The first novel feature being that the client's source code is analyzed to detect a remote procedure execution sequence constituting a set of RPCs that are highly likely to be executed successively and when such RPCs are

detected, a new remote procedure execution sequence is determined as a new single RPC, thereby optimizing a remote procedure call. The second novel feature being that an interface of the determined single RPC is defined according to an IDL description further optimizing the remote procedure call. These novel features of the present invention are clearly not taught or suggested by Vasudevan.

The first Novel Feature of the present invention is directed to an optimization of a remote procedure call by determining a new single RPC unifying a set of plural RPCs that are highly likely to be executed successively. The Present Invention has nothing to do with the unification of conventionally practiced IDLs, nor the mechanism-independent canonical specification as in Vasudevan. Also, Vasudevan has nothing to do with the optimization of a remote procedure call by determining a new single RPC unifying a set of plural RPCs that are highly likely to be executed successively as in the present invention.

The Examiner refers to col. 6, lines 7-26, as well as col. 7, lines 13-54 of Vasudevan, in connection to claim 1 and claim 3, and identifies that a new RPC integrating plural RPCs is added. This allegation by the Examiner is wrong. These passages of Vasudevan merely explain the registering of a VRPC Backend by use of a name service, etc., and an IDL compiler intended for modification of the canonical specification.

Therefore, Vasudevan fails to teach or suggest analyzing a source code of the client so as to detect a remote procedure execution sequence constituting a set of RPCs that are highly likely to be executed successively and determining a new

remote procedure for executing the remote procedure execution sequence in a single RPC as recited in the claims.

The second Novel Feature of the present invention states that an interface of the determined single RPC is defined to its IDL description in optimizing a remote procedure call. This feature of the present invention shows that an interface is additionally created for the newly determined single RPC defining its IDL description, for optimizing a remote procedure call. Thus, the present invention has nothing to do with the unification of conventionally practiced IDLs, as well as the mechanism-Independent canonical specification of Vasudevan.

Therefore, Vasudevan fails to teach or suggest defining an interface of the new remote procedure having been determined into the IDL description so as to allow the client to call the new remote procedure as recited in the claims.


Thus, as is quite clear from the above, the features of the present invention as recited in the claims are not anticipated nor rendered obvious by any of the references of record particularly Vasudevan.

In view of the foregoing amendments and remarks, Applicants submit that claims 33-39 are in condition for allowance. Accordingly, early allowance of claims 33-39 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (520.37631X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 312-6600